

united C2

the barrel (12) caused by the firing of the projectile (6);

and

a support for supporting the recoil buffering means and, thereby, the barrel (12) and breech assembly (15).

19. (amended) A traversing apparatus for an artillery gun comprising a breech assembly (15) connected to a barrel (12), the breech assembly (15) having a firing mechanism, for firing a projectile through an open end of the barrel (12), the traversing apparatus comprising: a support platform (31) which is adapted to support the barrel and breech assembly in such a manner that said barrel (12) and breech assembly (15) may rotate relative to the support platform (31) in order to impart a traversing motion to the barrel and breech assembly, the support platform including an arcuate guide member having support means adapted to support the barrel (12) and breech assembly (15) so that the support means follows the guide member during said traversing motion of the barrel (12) and breech assembly (15); and drive means secured to the support means and adapted to drive movement of the support means along the guide member to cause said traversing motion, wherein the drive means comprises a drive wheel (38) and a drive cable (39) wrapped around the drive wheel or in connection

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therewith, the drive cable being substantially fixed relative to the guide member so that rotation of the drive wheel (38) causes the drive wheel (38) to be driven along the guide member.

27. (amended) An elevating apparatus for an artillery gun of the type comprising a breech assembly (15) connected to a barrel (12), the breech assembly (15) having a firing mechanism for firing a projectile through an open end of the barrel (12), the elevating apparatus comprising three base members (33, 36) disposed in a substantially triangular arrangement, and three support members (22, 40) arranged to support the artillery gun, wherein at least one of the support members (40) is extendible to vary the elevation of the artillery gun, and wherein the base members (34, 36) and the support members (22, 40) are disposed in a substantially tetrahedral arrangement.

C4  
Respectfully submitted,

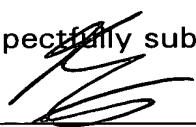
  
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Figure 6 illustrates a mortar bomb 60 leaving the barrel 12 of a mortar gun fitted with a muzzle brake 11 according to the present invention. The muzzle brake 11 includes a plurality of portholes to allow the gases to escape from the barrel 12 through the portholes instead of through the mouth of the barrel 12. The invention allows significant amount of gases to escape through the portholes before the bomb leaves the barrel muzzle. Therefore, the gas pressure at the muzzle ~~11~~ when the bomb 60 leaves the barrel 12 will be significantly reduced, thereby reducing muzzle disturbance. Consequently, the bomb 60 will reach steady-flight very much earlier, which will increase the range and improve the accuracy of the bomb 60

1. (amended) Ain a recoil buffering apparatus for ~~use with~~ an artillery gun ~~of the type comprising~~having a breech assembly (15) connected to a barrel (12), the breech assembly (15) having a firing mechanism for firing a projectile (60) through an open end of the barrel (12), the improvements of the recoil buffering apparatus comprising:

a recoil buffering means ~~adapted to be integrated or otherwise secured to~~with the barrel (12) ~~and movable for~~ movement therewith during recoil ~~action~~ of the barrel (12) caused by the firing of the projectile (60) ~~in~~ and

a support means associated with the recoil buffering means for supporting the recoil buffering means and, thereby supporting, the barrel (12) and breech assembly (15) through the recoil buffering means.

19. (amended) A traversing apparatus for an artillery gun comprising a breech assembly (15) connected to a barrel (12), the breech assembly (15) having a firing mechanism, for firing a projectile through an open end of the barrel (12), the traversing apparatus comprising: a support platform (31) which is adapted to support the barrel and breech assembly in such a manner that said barrel (12) and breech assembly (15) may rotate relative to the support platform (31) in order to impart a traversing motion to the barrel and breech assembly, the support platform including an arcuate guide member having support means adapted to support the barrel (12) and breech assembly (15) so that the support means follows the guide member during said traversing motion of the barrel (12) and breech assembly (15); and drive means secured to the support means and adapted to drive movement of the support means along the guide member to cause said traversing motion, wherein the drive means comprises a drive wheel (38) and a drive cable (39) wrapped around the drive wheel or in connection therewith, the drive cable being substantially fixed relative

to the guide member so that rotation of the drive wheel (38) causes the drive wheel (38) to be driven along the guide member.

27. (amended) An elevating apparatus for an artillery gun of the type comprising a breech assembly (15) connected to a barrel (12), the breech assembly (15) having a firing mechanism for firing a projectile through an open end of the barrel (12), the elevating apparatus comprising three base members (34, 36) disposed in a substantially triangular arrangement, and three support members (22, 40) arranged to support the artillery gun, wherein at least one of the support members (40) is extendible to vary the elevation of the artillery gun, and wherein the base members (34, 36) and the support members (22, 40) are disposed in a substantially tetrahedral arrangement.